

In item 2 on pages 2 to 3 of the above-identified Office action, claims 1 to 26 have been rejected as being obvious over Chapman (U.S. 5,073,943) under 35 U.S.C. § 103.

As will be explained below, it is believed that the claims were patentable over the cited art in their original form and as amended in the February 8, 1999 amendment, and, therefore, the claims have not been further amended to overcome the references.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful. Claim 1 calls for, *inter alia*, a sound system for a motor vehicle, including:

- a control unit;

- at least one unit for generating source data in the form of audio data;

- an amplifier unit for amplifying the source data;

- at least one speaker;

- a display unit;

- an input unit for operating the sound system; and

- a bus system assuring transmission among the individual units of the source data and control data for controlling the units,

the units being spaced apart from each other and at least a given one of the units other than the control unit having an associated memory representing a functional scope of the at least one given unit defining a variety of functions of the at least one given unit, the

functional scope to be transmitted through the bus system to the control unit, and the transmitted functional scope to be used in the control unit at least partially for forming a functional scope of the entire system.

With respect to claim 1, the Examiner confirms that Chapman "does not mention that all these units are spaced apart from each other." The Examiner then concludes, without further explanation, that "the spacing arrangement of the units would have been obvious since it would have been determined based on designer's preference." Applicant respectfully believes that this conclusion and any teaching, suggestion, or incentive possibly derived from Chapman is only present with hindsight judgment in view of the instant application. "It is impermissible, however, simply to engage in a hindsight reconstruction of the claimed invention, using the applicant's structure as a template and selecting elements from references to fill the gaps. . . . The references **themselves** must provide some teaching whereby the applicant's combination would have been obvious." In re Gorman, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991) (emphasis added). Here, no such teaching is present in Chapman. Therefore, the conclusory statement is unsupportable without providing some reference to confirm this conclusion.

Applicant respectfully believes that the spacing apart of the units of claim 1 is not obvious due to the limitation of available space in a motor vehicle. If anything, the

available space in a motor vehicle is typically very limited, thus directing common teaching towards combining units into a single, reduced-space apparatus -- not towards separating the units from each other, as set forth in amended claim 1 of the instant application.

Through the features of claim 1, the invention of the instant application provides the advantage of a customized sound system for separate locations in the vehicle, each location having differing needs and limitations. The advantageous features of the invention of the instant application are not limited only to motor vehicles. Limitations on space also occur in motor homes, houses and apartments. See claims 19 and 20. Where such limitations are present, separation of the units, while simultaneously connecting them through the bus system, will provide a user with an advanced and superior customization of the sound system.

While Chapman mentions different units of a sound system, nowhere does Chapman disclose or suggest the placement of stereo system units, let alone the separation of different units from each other as set forth in claim 1 of the instant application. See Chapman at col. 5, lines 16 to 18. If anything can be inferred from Chapman with respect to the combination or separation of sound system units, it is that Chapman relates to a single apparatus. This can be evidenced

from the statement, in col. 1, lines 45 to 47, which provides that audio systems are typically equipped with a time-of-day clock display -- a display that is typically coexistent with and identical to the audio system display. Therefore, applicant respectfully believes that Chapman does not disclose or suggest the unit placement feature of claim 1.

Chapman does describe an audio-sound system for a motor vehicle in which several units (audio processor 27, time-of-day-circuit 29, display 30) are connected to a data bus 28. Even though these units 27, 29, 30 are equipped with a memory, there still exists an essential difference between the two audio-sound systems -- in that Chapman's object differs significantly from the object of the invention. This difference is made clear in the distinction between the phrases "system parameter" and "functional scope."

The object of Chapman is to embody an audio-sound system for a motor vehicle such that system parameters can be turned on, adjusted and operated at low current supply when the ignition is turned off. In this condition, system parameters such as audio output volume and time-of-day can be adjusted or viewed, respectively. Specifically, Chapman provides that it is directed to "an audio system having a microcontroller external interrupt-wake-up feature which provides live digital controls even when the audio system and the automobile are off" for

resolving the problems of: (1) adjusting the "volume of the audio system without restoring full audio operation (i.e., speaker output of an audio program)" due to the last volume setting being "disagreeable to a new operator"; and (2) displaying a time-of-day while the car ignition is off without having to turn the ignition key. See Chapman at col. 1, lines 35 to 38 and 47 to 50, col. 4, lines 11 to 13 and 44 to 45, and col. 7, lines 48 to 51.

In contrast, to Chapman, the object of invention of the instant application involves the functional scope of the sound system. The object is solved by embodying an audio-sound system such that functional units (i.e., navigation computer, compact disc, digital video disk, video cassette recorder) can be removed from and added to the audio-sound system without requiring extensive service measures, especially service to the control unit 2. Chapman cannot solve the object of the invention of the instant application because its audio-sound system does not provide for, or even address, the removal of old functional units or the installation of new functional units. Support for this conclusion lies in the fact that Chapman system parameters, such as audio output volume, are stored in the memory of units 27, 29 and 30, whereas in the invention of the instant application the functional scope or the composite characteristics of units 2, 3, 4, 5, 6 and 7 are stored in their memories 9. With the stored functional scope

of the stored characteristics, the control unit 2 of the invention easily determines whether and which units were removed from or installed into the system. The determination is possible because the units are clearly characterized by their functional scope, which permits easy identification. For example, the control unit 2 recognizes the installation of a CD player as a CD player when a CD player has been installed into the system and similarly recognizes a television as a television when a television has been installed. Chapman's system is not able to do this because only "system parameters," not functional scope, are stored in the unit memories. See Chapman at claim 1, lines 5 and 6, claim 3, and the Abstract at lines 14 and 15.

If a unit is removed from or installed into the Chapman audio-sound system, extensive service measures must be carried out at the control unit (microcontroller 25). In contrast, in the invention of the instant application, the control unit 2 interrogates the memory 9 of the units for their functional scope and evaluates the functional scope for incorporation into the overall system. Specifically, claim 1 provides:

at least a given one of said units other than said control unit having an associated memory representing a functional scope of said at least one given unit defining a variety of functions of said at least one given unit, said functional scope to be transmitted through said bus system to said control unit, and said transmitted functional scope to be used in said control unit at least partially for forming a functional scope of the entire system.

Chapman does not disclose or even hint at the functional scope of a unit being stored in that unit's memory with the unit being interrogated and evaluated by a control unit. In fact, Chapman does not even address the functional scope concept. According to Chapman's claims, it is "system parameters" that are stored (i.e., audio output volume) and not the functional scope of the features. Thus, applicant respectfully disagrees with the statement that "Chapman teaches a sound system for a motor vehicle . . . having an associated memory representing a functional scope of the at least one given unit defining a variety of functions of the at least one given unit (e.g. the audio processor 27 defines a variety of functions such as volume control, audio signals balance control and so on)."  
See item 2 of the above-indicated Office action.

With respect to claims 20 and 21, the Examiner merely states that Chapman teaches the claimed limitations as modified by applicant's February 8, 1999 amendment. The Examiner provides no detailed explanation of the disclosure, suggestion, or motivation for the conclusion that Chapman teaches the features of the invention of the instant application in either the above-mentioned April 21, 1999 Office action, or the October 6, 1998 Office action. Applicant hereby incorporates by reference the above arguments to claim 20 and 21. These arguments apply equally to these two claims and show that

Chapman does not disclose or suggest the features of claims 20 or 21.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claims 1, 20 and 21. Claims 1, 20 and 21 are, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claims 1 and 21.

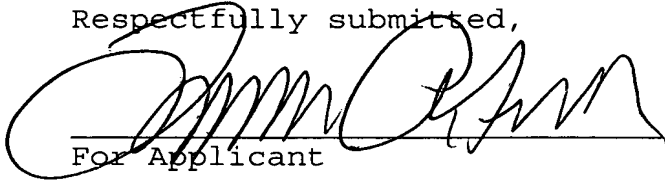
In view of the foregoing, reconsideration and allowance of claims 1 to 26 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a telephone call so that, if possible, patentable language can be worked out. In the alternative, the entry of the amendment is requested as it is believed to place the application in better condition for appeal, without requiring extension of the field of search.



Please charge any fees that might be due with respect to  
Sections 1.16 and 1.17 to the Deposit Account of Lerner and  
Greenberg, P.A., No. 12-1099.

Respectfully submitted,



For Applicant

**LAURENCE A. GREENBERG**  
**REG. NO. 29,308**

GLM:cgm

July 21, 1999

Lerner and Greenberg, P.A.  
Post Office Box 2480  
Hollywood, FL 33022-2480  
Tel: (954) 925-1100  
Fax: (954) 925-1101